

**REMARKS*****Claim Amendments***

The claims have been amended above to cancel non-elected process, composition and process-for-making claims 2-4, 7-15 and 18-21. It is understood that since method of treatment Group 1 has been elected, the non-elected claims are not eligible for rejoinder. Accordingly, these non-elected claims have been cancelled, without waiver or prejudice to Applicants' right to prosecute the subject matter thereof in one or more divisional applications.

In order to expedite the prosecution of this application to allowance, claim 1 has been amended to be more specifically directed toward "a method for the treatment of thrombosis and/or hypercoagulability in blood and/or tissues." Support for this amendment is found, *inter alia*, at specification page 3, lines 1-2.

Method of treatment claims 16-17 and 22 have been cancelled as being inconsistent in scope with amended independent method claim 1.

The above amendments to the elected claims are made without waiver or prejudice to Applicants' right to prosecute any subject matter deleted thereby in one or more continuing applications.

It should be clear from the above that these amendments are supported by the application as filed and do not add new matter. Accordingly, entry of these amendments is believed to be appropriate and is respectfully requested.

Following entry of these amendments, claims 1 and 5-6 remain pending in this application.

***Objection-Minor Informalities***

The Title of the Invention has been amended above to comply with the requirements of MPEP 601, thereby overcoming this ground for objection.

The cancellation of claims 16 and 17 has obviated the objection to the dependency of these claims being on cancelled claim 2.

The above amendment to claim 1 obviates the spelling error in the word "carboxypeptidase."

All ground for objection have therefore been overcome or obviated.

***Rejection-35 U.S.C. 112, 1<sup>st</sup> Paragraph***

Claims 1, 5-6, 16-17 and 22 are rejected under 35 U.S.C. 112, first paragraph, on the assertion that the specification, while being enabling for the treatment of diseases involved in carboxypeptidase U (CPU), does not reasonably provide enablement for prophylaxis of diseases involved with carboxypeptidase U. In order to expedite the prosecution of this application to allowance, all claims are now directed toward a “method for the treatment of thrombosis and/or hypercoagulability in blood and/or tissues”, thereby overcoming this ground for rejection.

***Rejection-35 U.S.C. 103***

Claims 1, 5-6, 16-17 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Itou *et al.* (Bioorganic & Medicinal Chemistry Letters, 1999, 9: 1243-1246, filed with IDS) in view of Bajzar (Arteriosclerosis, Thrombosis, and Vascular Biology) and Klement *et al.* (Blood, 1999, 94: 2735-2743).

The Examiner is correct in stating that Itou *et al.* teaches that cyclic peptides having the structure of anabaenopeptins are known to be efficacious inhibitors of carboxypeptidase A (CPA), another member of the A/B subfamily of metallocarboxypeptidases to which CPU belongs. Nevertheless, the inhibition mechanism of such peptides on CPA appears to be unknown and nothing in the prior art would seem to suggest that such compound could be also effective as inhibitors of CPU.

The Bajzar reference teaches that TAFIa exhibits carboxypeptidase B-like specificity, and the Klement reference teaches that TAFIa is inhibited by a carboxypeptidase inhibitor isolated from the potato tuber (PTI), a 39 amino acid peptide being a specific inhibitor of both the carboxypeptidase A and B family of proteases.

However, there is no suggestion that the anabaenopeptins, described as specific inhibitors of carboxypeptidase A by Itou *et al.* would share the properties of the structurally completely different carboxypeptidase inhibitor isolated from the potato tuber (PTI). The lack of predictability in activity is in fact illustrated by Itou *et al.* (see page 1245), where the lack of CPA inhibitory effect for anabaenopeptins B, E and F was surprisingly noted. Itou *et al.* attributed this lack of activity to the importance of the identity of the amino acid residue attached to the urea group, which further illustrates the lack of predictability in the grosser task of comparing molecules belonging two different structural classes.

It is therefore submitted that it would not have been obvious to the person skilled in the art to combine the teachings of Itou *et al.* with Bajzar and Klement *et al.* as the Examiner has done in supporting this rejection. It is therefore respectfully requested that this ground for rejection be withdrawn.

### ***Conclusion***

All grounds for rejection having been addressed by the above amendments and remarks and it is believed overcome, all claims should now be in condition for allowance, and a Notice to that effect is respectfully requested.

**Except** for issue fees payable under 37 C.F.R. §1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. §§1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account No. 50-0310. This paragraph is intended to be a **CONSTRUCTIVE PETITION FOR EXTENSION OF TIME** in accordance with 37 C.F.R. §1.136(a)(3).

Respectfully Submitted,  
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